**NEARESTCENTROID:**

The NearestCentroid classifier is a simple algorithm that represents each class by its members' centroid. As a result, it is similar to the label updating phase of the KMeans algorithm. It also has no parameters to select from, making it an excellent baseline classifier. It suffers when dealing with non-convex classes, as well as when dealing with classes with vastly different variances, because equal variance in all dimensions is assumed. For more complex methods that do not make this assumption, see Linear Discriminant Analysis (LinearDiscriminantAnalysis) and Quadratic Discriminant Analysis (QuadraticDiscriminantAnalysis). The default NearestCentroid is easy to use:

>>> >>> import sklearn.neighbors NearestCentroid

>>> np import numpy >>> >>> X = array([[-1, -1], [-2, -1], [-3, -2], [1, 1], [2, 1], [3, 2]) >>> clf = np.array([1, 1, 1, 2, 2, 2])